

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A steel processing material for addition into a heat of steel in ~~a steel making~~ an electric arc furnace comprising:

(a) from about 5% to about 30% of a dried post combustion material (PCM) recycled from the drop out box of the exhaust of the steel making an electric arc furnace; and

(b) from about 70% to about 95% of a slag foaming material;

~~wherein the dried post combustion material is sorted prior to being added to the steel making furnace.~~

Claim 2. (original) The steel processing material of claim 1 wherein the slag foaming material comprises about 90% coal and about 10% dolomitic stone.

Claim 3. (canceled)

Claim 4. (currently amended) The steel processing material of claim 1 wherein the dried ~~PCM~~ post combustion material comprises less than about 2% water.

Claim 5. (currently amended) The steel processing material of claim 1 wherein the dried ~~PCM~~ post combustion material is of an injectable particle size, ~~has~~ having an average particle size sufficiently small to allow injection of the ~~PCM~~ post combustion material into the heat of steel.

Claim 6. (currently amended) The steel processing material of claim 1 wherein the

dried ~~PCM~~ post combustion material has maximum particle not greater than about 5/16 of an inch.

Claim 7. (currently amended) The steel processing material of claim 1 wherein the dried ~~PCM~~ post combustion material comprises about 30% to about 55% Fe.

Claims 8-25. (canceled)

Claim 26. (currently amended) A steel processing material, at least partially recycled from an electric arc furnace, comprising:

(a) ~~an iron-bearing~~ a post combustion material having less than 2% moisture by weight and recycled from the drop out box of the ~~an electric~~ arc furnace; and

(b) a slag foaming material,

wherein the steel processing material contributes to the foaming of slag when added to a heat of steel in ~~the~~ an electric arc furnace and reacts with the heat to recover iron from the ~~iron-bearing~~ post combustion material to the heat, further wherein less than about 1% by weight of the total iron in the heat being recovered is iron.

Claims 27-29. (canceled)

Claim 30. (currently amended) A steel processing material for addition into a heat of steel in an electric arc furnace comprising:

(a) from about 5% to about 30% of a dried post combustion material (~~PCM~~) recycled from the drop out box of the ~~exhaust of~~ an electric arc furnace, and

(b) from about 70% to about 95% of a slag forming material;

~~wherein the dried post combustion material is sorted prior to being added to the electric arc furnace and,~~ wherein the recovery of iron from the steel processing material is only a portion

Serial No. 09/909,487

Amendment dated August 25, 2005

Reply to Official Action of February 25, 2005

of the iron in the heat.

Claims 31-32. (canceled)